Ubuhinzi bwo mu Rwanda: Ishwagara, Imbata y'isomo

IGIHE: Iminota 45

ABAHUGURWA: Abahinzi

UHUGURA: Uhugura abahinzi

AHANTU: Mu murima

INTEGO:

- **INTEGO YA 1: Gusobanura akamaro k'ishwagara mu butaka**
- **INTEGO YA 2: Abahinzi bamenye uburyo bwo gukoresha ishwagara, ingano bakoresha ndetse n'igiciro cyayo.**
- **INTEGO YA 3: Abahinzi bashyire ishwagara mu murima ku rugero rukwiye.**

IBIKORESHO:

- Ishwagara ihagije yo kwerekaniraho uko ikoreshwa. Ishobora kuba garama 100, 200 cyangwa 300 bitewe n'umurenge uwo ari wo.
- Udupaki tw'ishwagara turimo ingano y'ishwagara ukurikije imirenge. Wandike ingano (uburemere) n'umurenge kuri buri gapaki.
- Ibikombe bya pulasitiki byo gupimisha ishwagara (nibura ibikombe 5 kuri buri muhinzi fatizo).
- Imikasi yo gukata twa dupaki
- Ibikaramu binini byo kwandika uburemere bw'ishwagara iri muri buri gapaki.
- Isuka ya Majagu

IGIHE	IBIKUBIYEMO NGENDARWAHO
	IMYITEGURO IBANZIRIZA AMAHUGURWA: ▪ Imyiteguro y'iri somo igomba gukorerwa hamwe n'iy'isomo ku kurwanya isuri. Umenyeshe umuhinzi w'ibanze ko amahugurwa azaba arimo arebana no gukoresha ishwagara akazabera mu murima wo kwerekaniraho mu gihe cy'amahugurwa. ▪ Uzane ishwagara ihagije muza gukoresha mu murima wo kwerekaniraho mukurikije ibipimo byagenwe hakurikijwe imirenge hanyuma ushyire

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ishwagara nkeya mu ndobo ibonerana (nk'ikirahuri) kugira ngo uyereke abahinzi.
Ukore udupimisho two gupimisha ishwagara ukoresheje udukombe twa pulasitiki.
Icyitonderwa ku muntu uhugura: Uze gusigira udupimisho dukeya buri muhinzi fatizo.
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<tr><td>Iminota 5</td><td>
GUTANGIRA:
Icyitonderwa ku muntu uhugura: Si ngombwa gukoresha uburyo busanzwe bwo gutangira isomo; ukoreshe agakuru cyangwa agakino kagufasha kugabanya isomo mo ibyigwa bibiri, hanyuma usubire mu ntego z'isomo.

Gusubiramo intego:
Muri aya mahugurwa, turaza kureba akamaro k'ishwagara mu butaka, ndetse n'ibyiza n'igiciro cyo gukoresha ishwagara. Turareba kandi uburyo bwo gukoresha ishwagara neza.
IGIKORWA: Agakuru cyangwa agakino gatangira isomo.
Hitamo agakuru cyangwa agakino gakwiranye n'abahinzi urimo guhugura.
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<tr><td>Iminota 5</td><td>
INTEGO YA 1: Gusobanura akamari k'ishwagara mu butaka

BAZA: Ishwagara ni iki?
IBISUBIZO:
Ishwagara ni ikinyabutabire gifite karisiyumu nyinshi (uyu ni umunyungugu ituma amagufa cyangwa amenyo yawe akomera).
Hari ubwoko bubiri bw'ishwagara:
Ishwagara ikoreshwa mu buhinzi ibamo umunyu wa karisiyumu karubonate.
Ishwagara ibamo umunyu wa Dolomitic ikaba irimo imyunyu ya karisiyumu na manyeziyumu.
MUHEREREKANYE indobo irimo ishwagara kugira ngo abahinzi bayibone.
SOBANURA: Ishwagara ni ikinyabutabire gicukurwa mu Rwanda.

BAZA: Kuki abahinzi bakeneye gukoresha ishwagara mu mirima yabo ya kawa?
IBISUBIZO:
Ibihingwa na byo bikenera umunyu wa karisiyumu kimwe n'abantu.
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	▪ Umunyu wa karisiyumu ni ingenzi cyane mu butaka. Iyo uyu munyu ubaye mukeya mu butaka, ibihingwa ntibishobora kubona uborya byakira ibibitunga biba mu butaka. Ni ukuvuga ko rero kongera ishwagara mu butaka byongera udutungagihingwa turi mu butaka bityo ibiti bya kawa bikatubona byoroshye. ▪ Ubutaka bwinshi mu Rwanda bukennye ku munyu wa karisiyumu na manyeziyumu; bityo rero bukeneye ishwagara ikoreshwa mu buhinzi n’ishwagara ya Dolomitic.
Iminota 10	**INTEGO YA 2: Abahinzi bamenye uburyo bwo gukoresha ishwagara, ingano bakoresha ndetse n’igiciro cyayo.** **SUBANURA:** Muri 2009, TechnoServe ifatanije na Ocir Café (NAEB) bakoze ubushakashatsi ku butaka no ku mababi mu turere twose duhinga ikawa mu Rwanda. Dushingiye kuri ubu bushakashatsi twakoze ikarita igaragaza ishwagara n’izindi nyongeramusaruro zikenewe muri buri gace mu Rwanda. ▪ **Igihe cyo gukoresha ishwagara**: Ishwagara igomba kongerwa mu butaka mu gihe cy’izuba; ni ukuvuga hagati ya Nyakanga na Nzeri no hagati ya Mutarama na Gashyantare. Ishwagara ni iyo kongerera ubutaka ubushobozi, ntabwo ari ifumbire; ni ukuvuga ko itanyunyuzwa n’igihingwa ako kanya. Nuramuka ushyize ishwagara mu murima wawe mu gihe cy’imvura, imvura ishobora kuyitembana. Ishwagara ikoreshwa rimwe gusa mu mwaka. ▪ **Ubwoko bw’ishwagara bukoreshwa**: Mmu mwaka wa mbere, ugomba gukoresha ishwagara ikoreshwa mu buhinzi, naho mu mwaka wa kabiri ugakoresha ishwagara ya Dolomitic. Hanyuma ukajya uzisimburanya buri mwaka mu gihe cy’imyaka 6. ▪ **Ingano y’ishwagara ikoreshwa**: Ishwagara yongera ingano ya karisiyumu na manyeziyumu mu butaka buhoro buhoro. Igihe ingano ya karisiyumu na manyeziyumu igeze ku rugero rukwiye, ugomba kugabanya ingano y’ishwagara ukoresha kandi ukayikoresha gake, nka rimwe mu myaka runaka. *Icyitonderwa ku muntu uhugura: Ubwire abahinzi ingano y’ishwagara bakeneye gukoresha mu murenge wabo gusa, unababwiye ishwagara bakeneye gukoresha uyu mwaka.* **Imirenge izakoresha ishwagara muri 2017/2018:**

Izina ry'Umurenge	Ishwagara yo mu buhinzi
Kigoma, Cyanika, Kibumbwe, Kibirizi, Ngera, Rusenge , Gitambi	200g/kugiti
Kirimbi, Gihombo, Kanjongo, Nyakabuye and Gikundamvura	300g/kugiti

SOBANURA:

- Ishwagara ni ikinyabutabire gihendutse kandi gicukurwa mu Rwanda.
- Igihe abahinzi baguriye ishwagara hamwe bakayigura n'abayicukura bayigura ku magaranga 60 ku kiro.
- Uyiguze ku bayicuruza byamutwara amafaranga 200 ku kiro bityo ikaba ihenze kubera amafaranga y'ubwikorezi.
- Igiciro cy'ishwagara ikoreshwa mu buhinzi ku murima urimo ibiti 100 ni Amafaranga 2000, 4000 cyangwa 6000 (bitewe n'ingano ikoreshwa mu murenge wanyu).

Icyitonderwa ku muntu hugura: Ubwire abahinzi ingano y'ishwagara ikoreshwa mu murenge amahugurwa aberamo gusa.

Igiciro cy'ishwagara ku murima urimo ibiti 100 bya kawa:

Umurenge	Ingano garama/Igiti/ Umwaka	Ingano ku biti 100	Igiciri cy'ishwagara (Ikigereranyo cy' mafaranga ku kiro)
Kigoma, Cyanika, Kibumbwe, Kibirizi, Ngera, Rusenge and Gitambi	200	20Kg	4,000
Kirimbi, Gihombo, Kanjongo, Nyakabuye and Gikundamvura	300	30 kg	6,000

SOBANURA :

- Mu murima wo kwerekaniraho twabonye ko gukoresha ishwagara, ifumbire ya NPK n'imikorere myiza mu buhinzi mu gihe gikwiriye ishobora gutanga inyongera irenga 70 ku ijana mu myaka ibiri.

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- Ishwagara ni ikinyabutabire gihendutse kandi uzakoresha ibiro bikeya by'ikawa wasaruye ku biti byawe 100 kugira ngo ushobore kugura iyo shwagara.

BAZA: Muratekereza ko gukoresha ishwagara bizababyarira inyungu y'amafaranga?
MUBARE: Ni ibiro bingahe bya kawa uzakenera gusarura kugira ngo ushobore kugura ishwagara, ushingiye ku biciro bya kawa biriho ubu? MUBIGANIREHO.
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<tr><td>**Iminota 20**</td><td>

INTEGO YA 3: Abahinzi bashyire ishwagara mu murima ku rugero rukwiye.

BAZA: Ni ubuhe buryo bwiza bwo gukoresha ishwagara ku buryo umuntu akoresha ingano ikwiriye?
IGISUBIZO: Ukoresha igipimo.

SOBANURA: Dukoresheje umunzani, twakoze utu dupimisho kugira ngo dupime garama 100, 200 cyangwa 300 z'ishwagara. Iki ni cyo gipimo cyiza cyo gukoresha.

Icyitonderwa ku muntu uhugura: Uvuge gusa ibipimo bikoreshwa mu murenge wawe.
EREKANA agapimisho

SOBANURA:
Ushobora gukoresha iki gipimo ugakora utundi dupimisho ukurikije izi ntambwe zikurikira:
Icyitonderwa ku muntu uhugura: Erekana uko bikorwa:

- Uzuza agapimisho ishwagara.
- Yisuke mu kandi gakombe ushyire akamenyetso aho igera.
- Noneho kuramo ya shwagara ukatire ka gakombe aho ya shwagara yagarukiraga.
- Ubwo uraba ubonye agapimisho kagufasha gukora utundi bityo bityo.

Turaza gusigira umuhinzi fatizo akapimisho mushobora kwifashisha mukora utundi. **IGIKORWA: Gutera ishwagara.**

a) **EREKANA** uko batera ishwagara ku giti cya kawa kimwe (1) ukwirikije izi ngigo:

    a. Kuraho isaso yose aho ugiye gutera ishwagara.
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b. Bagaza intoki niba bikinewe . Ibutsa abahinzi ko imirimama yabo igomba guhora ibagaye igihe cyose.
c. Pima ishwagara wifashishize igipo gikwiriye.
d. Shyira ishwagara kuri Kare munsi no kuruhande usige cm 10 unvuye ku giti.
e. Shyira ku giti kigwirikiyeho uhuze ishwagara gerageza kuburyo ishwagara ikwira umurima wose .
f. Vanga ishwagara nitaka buhorobuhoro.
g. Shyiraho isaso(munsi y'igiti cyangwa hose nkuko wari wabyerekanye)
h. Karaba ku ntoki nusoza.

b) Shyira abahinzi mu matsinda 5, uhe buritsinda umurongo w' ikawa (ibiti 8) unapime .
c) Saba abahinzi gutera ishwagara bafatinyije mu matsinda.
d) Sura buritsinda urebe uko babikora munabiganireho.

- MUBIGANIREHO. Harimbogamizi nzirimo

Icyitonderwa ku muntu uhugura: Wibuke ko ishwagara ishyirwa mu murima ahantu hose, atari ku giti gusa. **Ushyire ishwagara mu buryo bungana ukoze ishusho ya kare izengurutse igiti hanyuma ukore ku buryo** *ayo mashusho ahura kugira ngo ubutaka bwose bube butwikiriwe n' ishwagara. Hhanyuma ukoreshe majagu wijiza ishwagara mu butaka mbere yo guhindura isaso.*

SOBANURA:

	▪ Kubera ko ishwagara atari ifumbire ahubwo ivugurura ubutaka, ugomba gushyira ishwagara hose mu butaka/mu murima bitari munsi y'ibiti gusa. ▪ Wagara ifasha ifumbire nka NPK n'ifumbire y'imborera gukora neza. ▪ Kugurira ishwagara hamwe nka Koperative birahendutse. ▪
Iminota 5	**GUSOZA:** **SUBIRAMO AMASOMO Y'INGENZI**. **IGIKORWA: Isuzumabumenyi** ▪ Baza abahugurwa ibibazo bikurikira: ○ Kuki ishwagara ari ingirakamaro? ○ Umuntu akoresha ishwagara ingana iki ku giti kimwe? ○ Ni he dushyira ishwagara mu murima? **IBIBAZO N'IBISUBIZO** **INTAMBWE ZIKURIKIRA:** *Subira ku mbata y'isomo ry'ingenzi mu gusoza.*